

5 **CLAIMS**

1. A bicompartiment bag comprising an assembly of two strong flexible outer sheets (1, 2), in one (1) of which sheets an access bushing (4) is affixed in a first bore (3), wherein the interior of such bag is divided into two chambers by means of a third separating flexible sheet (7) provided with a screen-like part (9) at its distal end located at the bottom of the bag, said third separating sheet (7) which, correspondingly with said bushing (4) is provided with a second bore (8) affixed around its edge on a plane (10) of the bushing end projecting into the bag, of said two chambers, a first chamber is in communication with a first opening (13) of the bushing (4) to enable the connection of the first chamber with a solvent line, and the second chamber is in communication with a second opening (12) of the bushing (4) to enable the exit of solution from the second chamber and wherein the two outer (1, 2) and the separating sheet (7) are watertightly joined at their contour.

20 2. A bag according to claim 1 characterized in that the plane (10) of the bushing end projecting into the bag is annular.

3. A bag according to claim 1 characterized in that the first chamber is at least partially filled with a powdered solute.

4. A bag according to claim 2 characterized in that said powdered solute is an ingredient to be used for hemodialysis, in particular sodium bicarbonate.

25 5. A bag according to claim 1 characterized in that inside the second chamber is provided a layer (5) separate from the bag, selected among a woven or injected material or the like, freely extending from a recess (6) made in correspondence with said bushing (4) to the bottom of the chamber.

30 6. A bag according to claim 1, characterized in that said bushing (4) is an annular body with a discoid base (11) of a greater diameter than the first and

5 the second bore wherein a radial tube (12) communicating its central axial space with the outside is located.

7. A bag according to claim 6 characterized in that a second member (17) is snapped on the bushing (4) as a first member in an air-tight manner.

8. A bag according to claim 7 characterized in that in an inner axial
10 cylindrical space (13) in the bushing (4) there are means (14, 15) functionally cooperating with complementary means (24, 25) existing on the second member (17) thus insuring their connection; in said second member (17) there is an axial cylindrical tube (18) with its end being sealed by an initially sealed valve means (26), said axial tube (18) is surrounded by another coaxial cylinder
15 (19) of a larger height, in the bottom of which there is at least one orifice (20) radially projecting towards the contour of said second member (17), wherein it ends in a peripheral groove (21).

9. A bag according to claim 8 characterized in that said valve (26) provided in the second member (17) consists of a thin sheet having lesser
20 strength lines (27) disposed in a cross-shaped configuration and grooves (28) that are quadrangularly engraved in the axial tube circular space, which grooves have a depth in the order of one half of the valve disc thickness.

10. A bag according to claims 1 characterized in that the screen-like part (9) comprises a filter to retain the powder solute.

25 11. A bag according to claims 7 characterized in that said two members (4, 17) providing access into the bag are coupled to each other by means of a thread.

12. A process for manufacturing the bag according to claim 1 characterized in that it comprises the following steps: Continually circulating
30 three laminar bands (1, 2, 7) of a suitable width and thickness superimposed on three levels, forming a first bore (3) in one of the outer bands (1) and a second

5 bore (8) and a screen part (9) in the interposed band (7), positioning and welding a bushing (4) into the first (3) and onto the second (8) bore, perimetral welding and final cutting of the three bands.

13. A bag-manufacturing process according to claim 12 characterized in that a drain segment (5) is inserting between the two bands (1, 7) with the first
10 (3) and second (8) bore before the perimetral welding step.

14. A bag-manufacturing process according to claim 12 characterized in that the bag is quality tested after the perimetral welding and final cutting step.

15. A bag-manufacturing process according to claim 12 characterized in that after the perimetral welding step the first chamber of the bag being defined
15 by the outer band (2) having no bore and the interposed band (7) is at least partially filled with a powdered solute through an opening (13) in the bushing (4) and that the opening in the bushing is closed with a lid (26).